# Tianyi (Sam) Zhou

https://developersam.com

sam@developersam.com | (607)-279-3876

## Education

#### **Cornell University**

BS in Computer Science

Expected May 2021 | Ithaca, NY College of Engineering Dean's List (All Semesters) GPA: 4.15 / 4.3

# Links

Personal Website: Developer Sam Blog: Developer Sam Blog GitHub: SamChou19815

# Courses

#### Past:

OO Design Data Structs Honors Discrete Structures Data Structs & Functional Programming Intro to Analysis of Algorithms

#### Ongoing:

Systems Programming Programming Languages & Logics Machine Learning Intelligent Systems

# Skills

# **Programming**

Over 10000 lines:

Java • Kotlin

Over 5000 lines:

Python • TypeScript • JavaScript OCaml • PHP • CSS • LATEX

Over 1000 lines:

Swift • Go

Familiar: MySQL

## **DevOps**

Familiar.

Kubernetes, Travis CI

# Experience

## Cornell University | Computer Science Teaching Assistant

Feb 2018 - Current | Ithaca, NY

- Responsible for holding office hours and grading assignments for students.
- Courses: 00 Design Data Structs Honors (90 students), Discrete Structures (350+ students).

## **U-Learn Education Group** | Software Engineering Intern

Dec 2017 - Jan 2018, May 2018 - June 2018 | Shanghai, China

- As the sole developer, developed a system with a responsive web inferface to automate workflow for assisting student college choice and application.
- The centralized system replaces the old way of manual data sharing between consultants and solves the problem of information mismanagement.
- All code was pushed to production and stably serving about 50 students and 10 consultants.

# **Projects**

#### **SAMPL** | Kotlin, ANTLR

2018 - Present

- An interpreter and compiler project for my own functional programming language SAMPL.
- The statically type-checked language supports generics, first-class functions and basic type inference, with a Kotlin-like syntax and OCaml-like semantics.

# Badges for GCP Cloud Build | TypeScript, Firebase

2018

• An easily-deployable Firebase Function to automatically generate build badges to be publicly displayed on GitHub.

## OConquer | OCaml, Java, Angular

2018

- A strategy game with military units controlled by programs, developed as the final project for CS 3110 (Functional Programming).
- It is powered by an OCaml backend and Angular frontend. Programs that control military units communicate with the backend via interactive IO.

#### **TEN** | Kotlin

2017-2018

- A board game that extends the tic-tac-toe to  $9 \times 9$  board, with an AI powered by Monte-Carlo Tree Search algorithm.
- The AI can achieve super-human performance with 1.5 seconds thinking time for each move.

# Chunk Reader | Java, JavaScript, CSS3, HTML5

2017

- A web app built during a Hackathon with over 70 teams and 300 participants.
- It used NLP to extract crucial information and generate a summary from any given text, with help of Google Cloud APIs.
- Prize: Best Use of Google Cloud Platform/Big Data Products.